

"WASP"
(CROWN "HA-14")
PLUG DRILL
INGERSOLL-RAND COMPANY
11 BROADWAY, NEW YORK

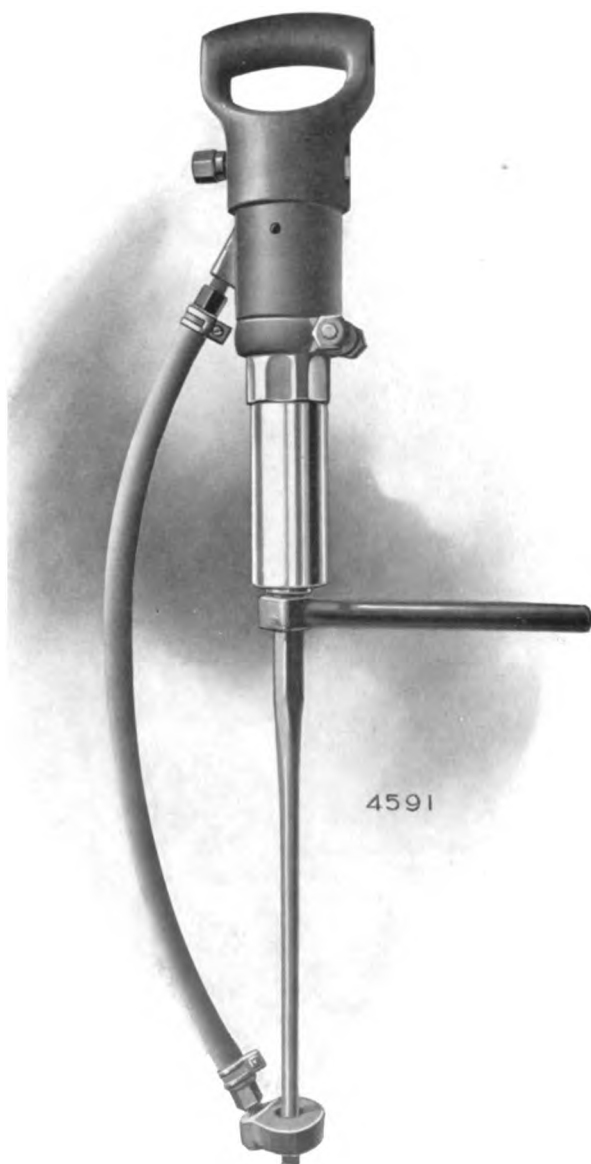
Form No. 4013

January, 1911



Drilling a Plug Hole with the "Wasp" Plug Drill

T H E ' ' W A S P ' ' P L U G D R I L L



The "Wasp" Plug Drill (Crown HA-14) Complete

THE "WASP" PLUG DRILL

"CROWN HA-14"

THE "Wasp" Plug Drill is one of the standard line of Ingersoll-Rand "Crown" hammer drills and is designed for the lightest plug drilling work, being recommended only for $\frac{5}{8}$ to $\frac{7}{8}$ -inch holes, three to six inches deep. For this class of work it uses standard plug drill steels, with shanks $1\frac{1}{16}$ inch diameter by $2\frac{5}{8}$ inches long.

This is a push-handle type, in which pressure on the handle opens the throttle and admits air. When the handle is drawn back to withdraw the steel from the hole, the air is automatically shut off. A short length of hose leads a portion of the exhaust air to a dust-collar resting around the steel at the mouth of the hole; and this exhaust jet blows the hole free from dust and cuttings. Air admission is at the side of the head-block. The steel is rotated by means of a handle which fits the square of the steel.

The "Wasp" has the latest form of "Crown" valve, travelling lengthwise of the drill. The cylinder is of special steel, hardened and ground in the bore. The piston or hammer is of hardened steel. The best materials are used throughout and the workmanship is unsurpassed, the result being a tool of high efficiency and splendid wearing qualities.

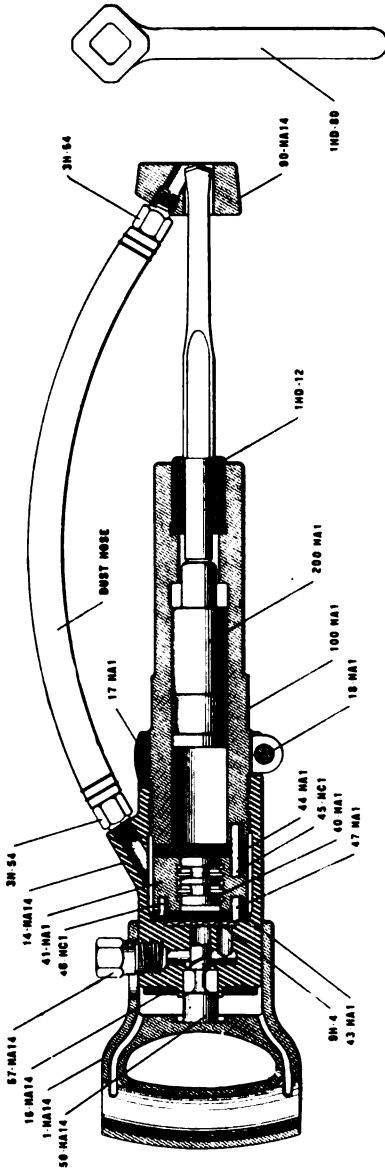
The specifications of this tool are as follows:

Cylinder diameter	1 $\frac{3}{4}$ inches
Stroke.....	2 $\frac{1}{2}$ inches
Length over all....	17 $\frac{1}{2}$ inches
Size of Air Inlet	$\frac{3}{8}$ inch
Weight	21 lbs.

The following air consumptions have been recorded by this tool under test by a water-displacement air meter:

Air Pressure	Cu. Ft. Free Air per Min.
40 lbs.	10
50 "	13
60 "	17
70 "	21
80 "	25
90 "	30
100 "	35

T H E ' ' W A S P ' ' P L U G D R I L L



4651

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|---------|----------------------------|---------|------------------------|
| 1-HA14 | Handle | 41-HA1 | Valve Box |
| 9H-4 | Inlet Screen | 43-HA1 | Valve Box Top Cap |
| 100-HA1 | Cylinder | 44-HA1 | Valve Box Bottom Cap |
| 11HD-12 | Cylinder Bushing | 45-HC1 | Valve Box Bottom Dowel |
| 14-HA14 | Head Block | 46-HC1 | Valve Box Cap Dowel |
| 15-HA14 | Head Block Washer | 47-HA1 | Valve Box Top Dowel |
| 17-HA1 | Cylinder Clamp | 50-HA14 | Throttle Valve |
| 18-HA1 | Cylinder Clamp Bolt | 57-HA14 | Nipple |
| 19-HA1 | Cylinder Clamp Bolt Washer | 3H-54 | Hose Nipple |
| 200-HA1 | Piston | 1HD-80 | Rotating Handle |
| 40-HA1 | Valve | 90-HA14 | Dust Hose Nozzle |

Duplicate Part List and Section of "Wasp" Plug Drill ("Crown HA-14")